



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW1217G BYPASS RATIO: 8.3
 UNIQUE ID NUMBER: 01P22PW169 PRESSURE RATIO (π_{00}): 32.7
 COMBUSTOR: TALON X, Block-C
 ENGINE TYPE: TF RATED THRUST (F_{00}) (kN): 75.7

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	0.1	27.2	44.3	4.8
AS % OF ORIGINAL LIMIT	0.5	23.0	42.0	19.0
AS % OF CAEP/2 LIMIT (NO _x)			53.0	
AS % OF CAEP/4 LIMIT (NO _x)			59.0	
AS % OF CAEP/6 LIMIT (NO _x)			65.0	
AS % OF CAEP/8 LIMIT (NO _x)			73.0	

For non-volatile particulate matter (nvPM) emissions, please refer to the ICAO Engine nvPM Emissions Data Sheet.

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 - OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	0.634	0.04	0.30	25.30	3.7
CLIMB OUT	85	2.2	0.524	0.02	0.40	18.60	2.7
APPROACH	30	4.0	0.184	0.01	2.50	8.60	0.4
IDLE	7	26.0	0.069	0.01	14.20	5.10	0.4
LTO TOTAL FUEL (kg) or EMISSIONS (g)			248	5	1678	2891	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				0.1	22.2	38.2	3.7
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)				0.05-0.07	20.8-23.2	37.8-38.4	3.4-4

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.2-102.2
TEMPERATURE (K)	276.5-293.2
ABS HUMIDITY (kg/kg)	0.00108-0.00576

FUEL

SPEC	Jet A
H/C	1.9
AROM (%)	18-18.7

MANUFACTURER: Pratt & Whitney
 TEST ORGANIZATION: Pratt & Whitney
 TEST LOCATION: East Hartford, CT
 TEST DATES: 28/03/2019-01/04/2019

NO_x REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
	2.3.2 d) (CAEP/6)
x	2.3.2 e) (CAEP/8)

REMARKS

- Data from certification report PWA-12113
- Block C Combustor
- Certification in accordance with ICAO Annex 16 Vol. II. 4th Edition, Part III, Chapter 2.

Compliance with Fuel Venting requirements: x ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)